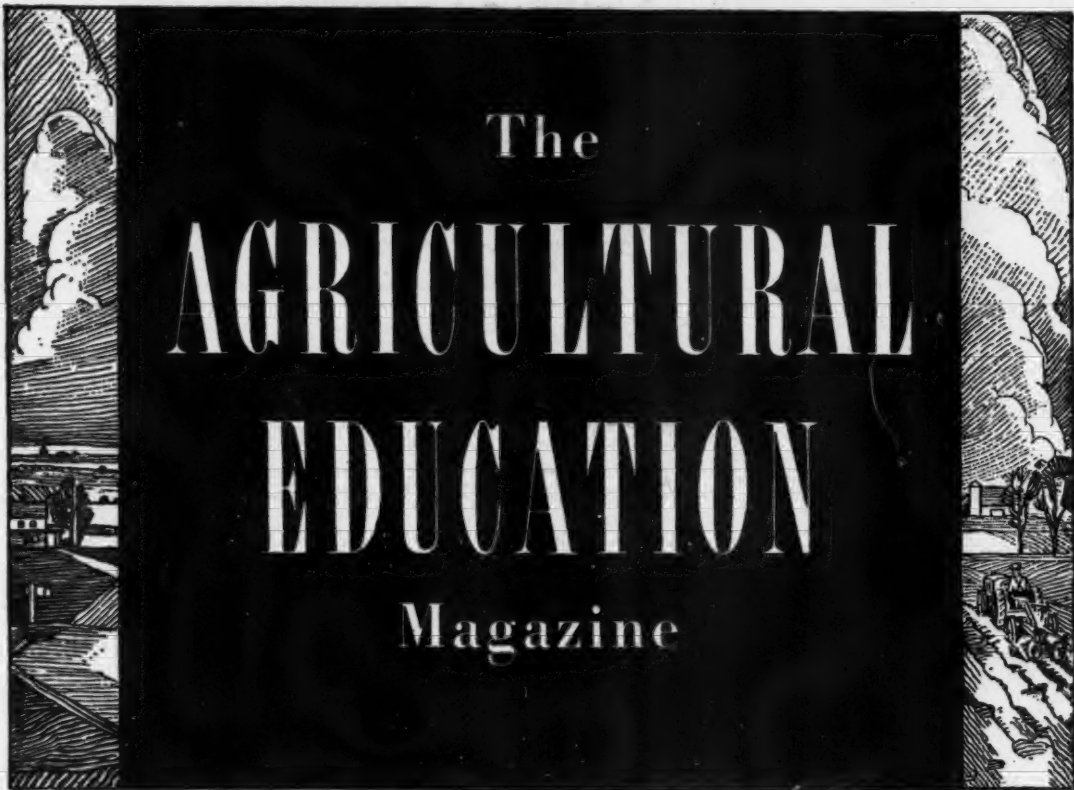


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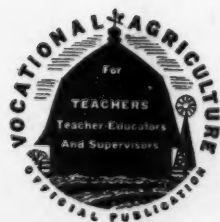


No. 11



*"LEARN to act with and for
others while you learn to think and
to judge for yourself."*

—John Dewey



The Agricultural Education Magazine

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Editorial Comment

Policies and Needs in Agricultural Education

(Concluded from last month)

Young Farmer Needs

AS VICE-PRESIDENT of the A.V.A. representing part-time education, it is to be expected that your editor is concerned with the improvement of our educational program for young farmers. Vocational instruction thru short courses is an accepted part of the program in most states. The organization of the young men into Young Farmer Associations is only partially accepted. Strong organizations with going programs in several states are one of the high spots of the programs in these states. We need more organizations of these young men with annual programs of work carefully planned by them under the direction of their teachers. Not as broad a program can be expected in this organization as in the organization of Future Farmers, but the needs of the group might very appropriately include as many of the areas listed in a preceding paragraph with reference to F.F.A. programs of work as the young farmers will choose. Certainly their emphasis will center, first of all, upon social activities. No doubt over the states many worthwhile accomplishments in this area might be reported and, if so, would constitute interesting reading to all and suggestions to many.

A particular area of instruction which needs emphasis is that arising from joint meetings of young farmers and young ladies of farm and village. Problems discussed in these groups which meet their peculiar needs can be made to serve a valuable purpose in the lives of these young people. Who will let our readers know of their accomplishments in this area?

Over the country generally there seems to be a shortage of part-time courses in the field of homemaking, a few states forming conspicuous exceptions. In many communities a teacher of agriculture and a teacher of home economics are employed in the same high school. It would seem that the teachers of agriculture, with their extensive experience in conducting short courses, might consider the possibility of working with their teachers of home economics, particularly in assisting them in securing a satisfactory enrollment of young ladies by scheduling the two short courses on the same evening. The announcement sent out thru the community might contain notices pertaining to both fields of service. A joint meeting of these groups occasionally is a possibility. Any contribution which vocational agriculture can make to the strengthening of the program of part-time education in home economics will be greatly appreciated by your vice-president and editor.

Needs in Research

In the field of research we can take satisfaction from the fact that it is generally accepted that agricultural education has carried on a more intensive and more thorough program of research than any other division of vocational education. Of this we are appreciative. It is in the direction of further efficiency and thoroughness that the next suggestion is made. Only one case is mentioned. Some years ago a committee was appointed to initiate a study designed to measure the efficiency of our departments. The committee's efforts resulted in the preparation of criteria for the evaluation of departments which were carried to the testing stage in several states. Nothing has been heard from it since the A.V.A. convention in Boston. Does this indicate that the problem was not well chosen, or that its technique was not workable, or that interest in the project has been lost, or that it is only a "fair weather" project? It would appear that the project itself could not be improved upon. Surely such an evaluation is basic. If improvements have been made in the techniques during the period since a report was last made, our readers, including teachers in all departments, would doubtless be interested in this improvement. In the meantime, it would be well to study the techniques of another device for measuring community programs which was initiated by Dr. George F. Ekstrom, our Business Manager, in

New Special Editors



Henry S. Brunner



R. W. Cline

Changes in special editors are announced as follows; Dr. Henry S. Brunner, Pennsylvania State College, State College, Pennsylvania, as Professional Editor; Dr. E. B. Knight, University of Tennessee, Knoxville, Tennessee, Research; Dr. R. W. Cline, University of Arizona, Tucson, Arizona, Farm Mechanics; and Professor Watson Armstrong, University of Kentucky, Farmer Classes.

The acceptance by these members of the responsibilities of special editors is an indication of their willingness to give a



E. B. Knight



W. A. Armstrong

part of their professional time to the magazine in order that it may continue its contribution to Agricultural Education. May their services be as valuable as those of their respective predecessors.

Contributors to the magazine are asked to submit their articles to the appropriate special editor. They should be carefully edited according to the standards of magazine journalism before the writer forwards them. The quality of articles submitted now is such that a mediocre article carelessly written will receive no consideration by the editors. May we, therefore, bespeak from you timely articles, carefully written and edited and submitted in liberal numbers.

his dissertation entitled, "The Organization of Techniques for Evaluating Programs of Vocational Education in Agriculture," which has been improved upon and applied apparently with marked success by Dr. H. M. Hamlin of the University of Illinois.

Perhaps other evaluations of departments have been tried and are past the experimental stage and ready for reporting. May we hear about any attempts thruout the country to measure our work?

These suggestions include a few of the areas in which the needs of agricultural education might be appropriately presented and discussed thru the columns of the magazine. Other equally vital considerations may occur to our readers. Contributions discussing them or relating your experiences with them are requested.

The Modern Teacher

"A teacher is a person, usually a woman, who co-operates with every known federal, state, and county agency in directing boys and girls between the ages of six and 17 in vast money and junk drives for the armed services, the national treasury, the Red Cross, and for the making of aircraft carriers, beepers, jeeps, and peeps; in supervising essay, poster and oratorical contests of every conceivable variety; in registering every man, woman, and child in the United States several times a year; in supervising labor divisions of children for various purposes; and in teaching everything but reading, writing, arithmetic, science, history, English, and mathematics; all of this from an imposing headquarters originally known as a schoolhouse."

S. S. SUTHERLAND

Professional

HENRY S. BRUNNER

The New Conception of the Responsibility of a Teacher of Vocational Agriculture to His School and Community

S. M. JACKSON, State Supervisor of Vocational Agriculture, Louisiana

WE ARE coming into a new world order for continents, nations, races, classes, ages, and for both sexes of our human kind. Men are attempting achievements in every realm of human effort that stagger the imagination. Everywhere new developments are taking place which are reshaping the lives of individuals and remaking our Nation. If we are able, in any degree, to aid this process and develop the rural areas of this Nation, then we must have a new conception of the responsibility of a teacher of vocational agriculture, to his school and community in order to furnish the necessary leadership in the development of our rural areas. It is necessary to develop practical educational plans that will help to remake our Nation.

All of America's resources must be directed now toward winning the war, and we must salvage that which is good in order to be prepared for a program of occupational retraining in the postwar period. Preparing should be perpetual preparation so that such an emergency as the world revolution we are now in shall never again confront us. It is up to us to develop the home front and win the war on the home front or else our efforts on the battlefield will have been in vain.

The world will be as one big community because of the improved transportation and communication systems. If our Nation is to continue to be a leading nation, it must be strong. Remember that a chain is no stronger than its weakest link. A nation is no stronger than the communities which make up that nation. It behooves us to help make our communities strong. In order to do this, we must have training programs in our public schools to meet the needs of our people.

The School's Responsibility

The purpose of schools is to prepare useful citizens and to teach people how to make a living and how to live in a changing world. It is difficult to justify a school program unless that school is functional to the extent that it is developing the people of the community. The public school is the only agency legally charged with the responsibility of teaching, and it is the duty and responsibility of those in charge of educational pro-



S. M. Jackson

These contributions by Supervisors Jackson and Sasman represent two points of view with reference to postwar vocational education in agriculture as presented before the agricultural section of the A.V.A. and discussed from the floor at that time. The points of view might be summarized, tho inadequately, as "Agricultural Education and Community Service" vs. "Agricultural Education." The differences in points of view might suggest a continuing argument by other writers. The Editor calls attention to the subjective nature of the content, beliefs honestly held, no doubt, but not strongly supported by objective evidence or accepted principles. He therefore announces that further articles for publication supporting either point of view must be based upon acceptable evidence. Nothing will be gained in promoting a discussion based largely upon opinion.

grams to provide the types of training that will meet the needs of all of the people of these respective communities.

Every school in the nation should become a community training and service center, providing adequate facilities for the training of children in school, youth out of school, and the adults so that the schools can operate on a twelve-months' basis, giving the necessary training and service to all of the people in order that standards of living can be raised and happiness and contentment realized.

The Teacher Leads

Their educational program in vocational agriculture is of utmost importance and is an integral part of the whole educational system. It is the duty and the responsibility of the teacher of vocational agriculture to furnish the leadership and assistance needed in the development of practical and functional programs in education in our rural areas in order to meet the needs of the rural people so that the ideals, abilities, and skills will be developed which will make for civic and social strength and for economic security. The educational program in vocational agriculture has, as its purpose, to train farm people to be proficient in farming. Special training for a life's vocation should be given which will help to build a structure to support a more wholesome type of rural life. The program in vocational agriculture should

always be based on the needs of the people in the respective communities where the departments are established. In the development of the courses in vocational agriculture to meet these needs, the teacher should always teach the scientific principles and practices of agriculture based on the individual and community needs of the students. Also, agricultural practices should be improved by teaching efficient farm organization, the adjustment of crops and livestock according to the agricultural outlook, low-cost production practices, efficiency with labor, control of waste, standardization of products, proper preparation for the market, orderly marketing, sound financing, and the conservation of natural and human resources. They should also stress the live-at-home program, the improvement of health, the beautification of homes, schools, churches, and other buildings by the use of natural shrubbery, trees, and flowers, and also give instruction in farm-shop skills. Emphasis should always be placed upon a wholesome and adequate social life, establishment in farming, leadership, and the conservation of natural and human resources.

Meet Life Needs

The educational process in agriculture is a continuing process. It is not possible to complete the training for farming in any given period of time. The foundation for farm training should be given in the elementary grades so that the student will have a desire to take training in vocational agriculture when he reaches the high-school level and continue to receive instruction thru the period of young manhood out-of-school and thru adulthood as a farmer. This instruction should include the most significant social, civic, and economic problems of farm life.

In addition to giving training to the farm people of the community, plans should be made for giving farm training to those in the armed service who will need to be rehabilitated. For example, a young man in the armed service, desiring to farm upon his return to civilian life, could be trained in an agricultural service center so that he could properly repair and construct various types of farm machinery in the farm shop and at the end of his training could get financial aid to help him become established in this type of work. Another example may be where a young man with a certain degree of disability may want to settle in a small rural community or village because he is too disabled to carry on the heavy work of farming. This young man could be trained in a department of vocational agriculture properly equipped so that he could operate a small hatchery and also a small nursery plot for growing ornamental plants, shrubs, and flowers for sale, and could have a year-round home garden for home consumption. A man so situated would soon be in a position to make a satisfactory living and maintain a relatively high standard of

(Continued on page 217)

Postwar Planning for Vocational Agriculture

LOUIS M. SASMAN, State Supervisor of Vocational Agriculture, Wisconsin

WITH the development of vocational education starting early in the Twentieth Century, the attention of the public schools of America below college grade was, for the first time directed to the possibilities of combining work and study in a school program. So far as agriculture was concerned the intent was rather definite in the provision in the Smith-Hughes law that "schools shall provide for directed or supervised practice in agriculture, either on a farm provided for by the school, or other farms, for at least six months per year." This combination of study and practice was also clearly stated to be designed "to meet the needs of persons over 14 years of age who have entered upon or are preparing to enter upon the work of the farm or of the farm home."



L. M. Sasman

A Brief Review

Under the provisions of this law, passed by Congress in 1917, and subsequent laws which have provided increased appropriations without basically changing the intent of the law, a gradual increase in enrollments in vocational education in agriculture for the past 25 years has been maintained. In 1918 there were enrolled in all classes in vocational agriculture in the United States, 15,450 persons. By 1924, the number had increased to 89,640, six times that of 1918. At that time, 15,227 adults were enrolled in evening classes which was about the same number as had been enrolled in the whole program in 1918. Of course the major enrollment in 1924 was in high-school classes with a little over 69,000 of the total 89,000. By 1941 the number enrolled in vocational agriculture was about 600,000 (40 times that of 1918) of whom approximately 200,000, or one-third, were in adult classes, almost one-tenth were in young-farmer classes, a little over one-half were in high-school classes, and one-sixtieth were in day-unit classes. During that quarter of a century of progress, each year had seen an increasing enrollment in classes in vocational agriculture. Leaders in vocational education had gone three times before Congress to get increased appropriations to carry on the expanding program. Each time their efforts met with signal approval. Furthermore, each of those times, i.e., in securing appropriations under the George-Elzey, the George-Reed, and the George-Deen Acts, the support received from farm organizations for the work in Agricultural Education was a tremendous factor in providing the legislation. In other words, vocational education in agriculture has demonstrated its value to the satisfaction of farmers throughout the nation. We also know from personal experience that, in thousands of

schools today, vocational agriculture is looked upon by the community as a whole as the very heart of the school.

In 1940, due to the exigencies of the war situation, national defense courses were established in vocational education and vocational training of adults in agriculture was given the greatest impetus that it had ever received. For the first time the practice was established of hiring as instructors in farm mechanics and to some extent in production courses, men with practical experience but no training or experience in teaching. For the first time too, federal funds were available on a non-matching basis; and also for the purchase of equipment and supplies.

Previously there had been developing in some of the states, especially in Georgia and South Carolina, community canning centers, operated on the school grounds and often in school buildings, with instructors in agriculture and home-making serving as instructors or supervisors in the canneries. Under the OSYA program a course in the production, conservation, and processing of food for farm families was soon established which made it possible to provide federal funds for equipment and supplies for instruction in canning, and has led to the establishment of community canneries from north to south and from east to west in most of the states of the union. Under this program funds have been provided to equip canneries completely and to hire instructors for all phases of the canning program.

Now we are engaged in a program of postwar planning, and questions arise as to what form postwar training in vocational agriculture should take.

War-time Changes

As a result of the Food Production War Training Program and the community cannery programs which have been developed in many states, the suggestion has been made that departments of vocational agriculture in high schools should not only operate community canneries but should also operate locker plants, sweet potato curing rooms, post-treating facilities, incubators and brooders, and other services needed in the community. If this suggestion is followed, the department of vocational agriculture will be established as a department which has service as its primary function and training will be secondary. Should such a policy be developed in vocational agriculture, it would seem that it might also be applied to other branches of vocational education. In other words, if rural high schools should operate canneries, locker plants, and hatcheries, city schools could as well operate auto repair garages, locker plants, and general service and repair shops. Such services are now performed by either private or co-operative agencies and in most states considerable objection to such services being performed by the schools would arise. *It is and should continue to be the function of the school to aid in training youth and adults so that they will be able to perform the service needed in their respective communities. The actual performance*

of those services, however, is not and should not be a function of the schools.

However, if the educational authorities in a state believe that schools should not only train people to perform services but should provide the facilities and the staff to carry on the services, that decision should be left to the state authorities. Federal aid should be an aid to the states in carrying out the program best adapted to meet the needs of that state.

In spite of the fact that vocational agriculture has been outstandingly successful in its growth and development as a farmer-training program, there are some weaknesses which we as workers in vocational agriculture must frankly recognize.

It is evident that much of what we have been calling vocational agriculture for the past 25 years is not really vocational education in any strict sense of the term. The core of the program has been a system of classes in agriculture for high-school boys. These classes have been made up principally of farm boys, but in many cases these boys have come to high school hoping to get away from the farm rather than to train for farming. So we find that some of them enroll in agriculture because they want to farm, some because they know the instructor in agriculture, and some because they are rather sure that agriculture will be more interesting, and not any more difficult, than any subject they would have to take in the place of it. The instructor in agriculture is in most cases farm reared and a graduate of a college of agriculture. He has the ability to do many of the jobs on the farm, but in most cases has had no experience in actual farm operation and management. Altho there has been a continually increasing enrollment in young-farmer and adult classes, in no state has the enrollment in these classes included more than a small fraction of those "who have entered upon or are preparing to enter upon, the work of the farm."

A Postwar Program

Taking these facts into consideration, it would seem that the following would be a desirable postwar program for vocational agriculture:

1. There should be a pre-vocational training and guidance program for farm youth from 14 to 16 years of age. There might be included in the enrollment both boys and girls and both farm and non-farm rural youth. There should be included a combination of study and experience varying according to the pupils' needs, from a type of instruction consisting largely of laboratory work to a home experience program similar to that now commonly provided for first- and second-year high-school pupils.

2. There should be a program of vocational training for in-school farm youth, ages 16 to 18, definitely planning to farm. This program should be a combination of study and experience comparable to that found in the better types of programs at the present time. The instruction should be of a nature more practical than that found in most of our present programs. There is some question whether any more practical type of agricultural instruction has been discovered for in-school youth than that which provided half-day classes with liberal use of the farms of the community for instructional purposes.

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Methods of Teaching

G. P. DEYOE

Securing and Using Data for Diagnosis, Teaching, and Evaluation in Agricultural Education

H. M. HAMLIN, Teacher Education, University of Illinois

The Need for Data

IF WE are to be effective in teaching agriculture either to high-school boys or to adult farmers, we must know the abilities of those who enter our classes and we must know whether these abilities have increased following instruction.

The persons who come into our classes must expect to provide us with whatever information we need to help them improve their abilities. When a person enters a typing class or a shop class, he expects to have his work observed and his faults pointed out and corrected. In classes generally, the students expect to submit to examinations. In agriculture the most important information needed, so that the teacher can actually teach, is information about the results a farmer is getting and the procedures he is using on his farm. There should be no reluctance on the part of the teacher to ask for this information or to exercise his privilege of visiting his farmer class members to observe their procedures and results.

Standards and criteria of farming efficiency are fairly well worked out. It remains for teachers of agriculture to use them in their teaching. For example, the criterion "pounds of pork per sow" is an excellent index of efficiency in pork production. "Pounds of butterfat per cow," "eggs per hen," "percentage of tillable land in legumes," "crop yields," "percentage lamb crop," "pounds wool per ewe," "death rate in the laying flock," and "market grades" are other excellent criteria.

Not only must the farmer expect to have his work evaluated by his teacher; the teacher must expect to have his own work evaluated. One of the best means of evaluating the teacher's work is by the progress of the farmers he teaches as shown by their gains with reference to accepted indices of farming efficiency.

Procedures in Securing and Using Data

There are two primary ways of getting the information which is needed. *Estimates* furnished by the farmers may be recorded on forms supplied by the teacher. *Records* may be kept by the farmers which will yield the teacher more nearly accurate information. We may have to start with the first, but we should work as fast as we can toward the second.



H. M. Hamlin

Securing Farmers' Estimates: Forms in use in Illinois for securing farmers' estimates are constructed along the following lines.

1. They are very brief. The information sought can be given on one side of a 4" x 6" card.

2. They call for results, rather than for practices or opinions. It is believed that if the results farmers are getting are known, it will be possible to determine the probable causes of these results and so to correct practices.

3. They deal with one enterprise at a time.

4. The questions are carefully worded so that the farmers can usually answer them and so that, when they are completely answered, the information will be available from which to compute one or more of the indices of farming efficiency.

5. Little writing by the farmer is required. His responses are confined largely to filling in numerals or answering "yes" or "no."

6. No data are called for which cannot be used for an important purpose.

7. The names of the farmers are requested, so that a report can later be made to each farmer which will show his own record in comparison with the records of his fellow farmers and in comparison with accepted standards.

8. No financial or other data are requested which the farmers might object to giving.

9. The cards are constructed so that the data from them can be summarized with a Hollerith machine.

Surveys designed to determine the *practices* farmers use and the *opinions* they hold are often desirable. The forms which have been designed for state-wide use are intended to provide the minimum of information which all teachers will need. Supplementary surveys of practices and opinions may be designed and used by individual teachers.

Using Estimates for Diagnosis, Teaching, and Evaluation: The estimates secured may be used to diagnose the general weaknesses of a class and the weaknesses of individual farmers. For example, reports may show that 40 percent of the pigs farrowed on the farms of class members during the previous year were lost and that the range in losses was from 20 to 60 percent with individual losses evenly distributed between those percentages. Such a situation would call for considerable class time to be devoted to measures for preventing these losses. Further analysis might reveal that there were certain general causes, such as influenza, crushing of pigs by the sows, or the farrowing of small and weak litters. These could be dealt with, one by one, in class. But there may be in the class a farmer

whose losses were due entirely to cholera. Unless he receives individual help with his special problem, the instruction given the class may be wasted upon him. Diagnosis must be individual and instruction must likewise be individual.

Study of the data might reveal that in some cases all of the difficulties experienced were due to mismanagement at and immediately following farrowing. For 50 weeks during the year, a farmer's swine management may be excellent but all his profits may be lost in two weeks. With data on the point available, we may "put the oil where the squeak is."

Teachers have found that a good way to start a course is to inquire, "How efficient are we as producers of this commodity?" An entire evening can be spent setting up production standards and comparing with these standards the results the class members have been getting. As a result of such a discussion, the problems which should be studied during the remainder of the course are discovered.

It would be desirable if every class member would, while he is a member of the class, start records which would give him accurate data regarding his efficiency in conducting the enterprise being studied. It is not to be expected that all farmers will do so. To get a picture of the results secured by the entire class, it may be necessary to gather the same data (i.e., estimates) at the end of the year which were secured at the end of the previous year, so that comparisons may be made. Farmers who attend evening schools year after year gradually become more reliable in the estimates they make. The process proposed is like giving a pretest and a final examination in a course, except that the tests are performance tests.

Substituting Records for Estimates: In practically every class there are farmers interested in keeping records on the enterprise studied. Every encouragement should be given them. Data from records can be substituted for estimates in evaluating the progress of these farmers.

A form on a 4" x 6" card may be used to keep the simple records needed for computing the production of pork per sow. Similar forms may be prepared for other enterprises.

In some cases, it may be advisable for the teacher to give his own services for a year or so in getting the farmers started with these records. In other cases, the older high-school boys may assist the farmers. Occasionally it is possible to launch a record association, such as dairy-herd improvement association or a sow-testing organization with a part-time or full-time man employed by the farmers to help keep the records. The war now retards the development of such associations.

Securing and Using Data Regarding the Entire Community: It is highly desirable, when possible, to check the agricultural progress of the entire community through estimates by farmers of their efficiency in relation to established criteria. The same forms may be used which are used in organized classes. It may not be possible

to get the data each year, but surveys every two or three years will help.

There are three principal advantages in studying the progress of farmers generally:

1. It helps to keep the teacher thinking in terms of the entire community rather than in terms of those who happen to come to his classes.

2. It provides a check upon the teaching which has been done because it makes possible comparisons between those who have and those who have not received instruction.

3. It catches the indirect effects of teaching. It is commonly found that farmers who have not been instructed quite generally adopt the practices taught to those who have attended classes, but that they adopt them one or two years after those who have been reached directly.

It is especially desirable this year that we compare the production of pork per sow of the farmers attending our 275 Illinois evening classes in pork production and of the farmers who did not attend. We had a bad spring for farrowing and the early losses of pigs were high. If we compare the production of pork per sow of evening-class members in 1942 and in 1943, we may find that it declined in spite of our instruction, but we may find also that it declined less than on the farms of those who did not attend pork-production classes.

At least 50 farms should be included in a survey of an entire community. If the farms chosen are representative, no more are necessary. Care should be taken that the farms selected to be surveyed are representative of the community in such ways as the following:

1. Geographical distribution
2. Soil type
3. Type of farming
4. Percentage of tenants and owners
5. Age of farmers

Though dependable data may be secured with a small number of returns, it is advisable to include in surveys all who wish to co-operate, since there is value to them in participating and the community averages are less likely to be questioned if the percentage of farms included is larger.

It is desirable to report back to those who have co-operated in a general community survey, at the request of the co-operators:

1. The farmer's individual standing with respect to the criteria of farming efficiency involved

2. The community average for the same criteria

3. The accepted standards for these criteria (When such standards are lacking, the achievements of the top one-third of the farmers of the community, or some other standard based upon community data, may be substituted.)

The best means of getting information from farmers who do not attend classes which has thus far been discovered is to have the boys in high-school classes in agriculture get it. If this procedure is to be used, the following precautions should be observed:

1. Develop an interest in the boys in making this sort of study of the community. Do not ask the boys to do the job until they will do it voluntarily.

2. Have the boys share in determining the data to be gathered and in constructing the forms to be used. When good forms are already available, they will probably decide to use these forms.

3. Have the boys gather the data on their own farms first, summarize these data, and draw conclusions from them. They will then understand the form they are using well enough so that they can explain it to other farmers.

4. Expect each boy to get information from only two to six farms.

5. Ask the boys to approach only persons they believe will be co-operative. The boys should be protected from rebuffs. No chances should be taken that farmers will be antagonized toward the department and the school.

Better results will be secured if the forms to be used have been approved in advance by an advisory council of farmers and a letter is sent out telling of their action and assuring those who are to participate that their individual reports will not be publicized either in the community or elsewhere.

The teacher should never need to ask farmers who are not in his classes for data. He may, however, wish to carry cards with him which he can get filled out incidentally as he travels about his community.

Studies of this sort are best attempted during slack seasons in farming. A survey is best taken soon after the close of the season for the enterprise surveyed.

Using the Data in the Community, State, and Nation: Data from farmers' estimates and records are usable in the community as well as in class work. Reports to the principal and board of education may include many of them. They may be summarized for newspaper articles and for charts used at community meetings. General advisory councils and adult-school councils may use them in planning programs of agricultural education and in evaluating their outcomes.

Our studies to date indicate that teachers of agriculture are actually doing more than they think they are doing. They need have no fear of evaluations based on data of this sort. In no other subject is there the opportunity for objective studies of outcomes which is available in agriculture. We should use our special advantage.

Preserving the Data: Records of information collected by teachers of vocational agriculture should be preserved as the basis for a long-time study of agriculture as carried on by the rank-and-file of farmers of a state and of the effects upon it of the teaching of agriculture. Local data should be as faithfully preserved in the records of each department.

Diagnosing and Evaluating the Boys' Farming Programs: The same procedures usable with adult farmers are applicable in diagnosing needs and appraising progress in connection with the boys' farming programs and group projects. The best results are secured when a project is continued for a number of years with annual evaluations and diagnoses of difficulties. If boys become habituated to the use of a wide range of criteria of farming efficiency while they are in high school, they will tend to think in these terms as farmers and to be dissatisfied when they do not know how they stand with respect to these criteria or when they fail to meet them.

It has been found that many boys will carry out rather complete evaluations of their entire home-farm situations while they are in high school, resulting in definite diagnoses of the needs of their particular farms and in programs for meeting them which can be carried out over a

period of years. An excellent illustration is the case of Glenn Schuelke, of Owatonna, Minnesota, which was reported in the May, 1943 issue of the *Agricultural Education Magazine*.

Interpretation of Data in Evaluation

Extreme care must be exercised in using data of this sort in attempts at the evaluation of agricultural education.

It has already been pointed out that surveys and records provide only a part of the information needed for the evaluation of outcomes. There is other evidence that students are progressing toward their educational objectives. Changes in interests, attitudes, ideals, and understandings can be detected thru observations, conferences, and examinations.

It is never possible to determine the extent to which the school has contributed toward the improvements effected. The education of an individual in agriculture is accomplished by many agencies and influences working together: the home, the school, the agricultural extension service, farmers' organizations, agricultural magazines, the radio. *Teachers should never claim credit for the progress noted.* The students and the public will usually assign credit fairly when the results are known.

All use of surveys and records for evaluation should be tempered with "common sense." The best we can hope for is a fairly accurate *appraisal* of outcomes, not a definite *measurement* of them.

Altho teachers may not honestly claim full credit for the attainments of their students, they are given credit by the public for their efforts to find out where their students stand and whether they are advancing. Teachers indicate thereby that they are willing to face the facts and that they are not trying to delude themselves or the public into believing that there are important educational outcomes when none can be objectively detected. Studying the facts of educational progress and retrogression with those concerned is one of the finest gestures a teacher can make in promoting good public relations.

Effects on Agricultural Education of Improved Diagnosis and Evaluation

The effects on agricultural education from better means of diagnosing individual difficulties and evaluating individual progress can be inferred to some extent from noting the effects of similar improvements in other fields.

Typing and stenography are much better taught because standards of performance have been evolved.

Dairy herd improvement associations have been proved to be the best device for increasing milk production. Keeping records of individual performance is the most essential part of the service these associations render.

Electricity was once an unknown and unused force. We still do not know what it is, but we have developed measures of its effects which have helped us in dealing with it. How much use could we make of electricity if we lacked these measures?

These are examples of the positive use of data for diagnosis and evaluation. Let us look at some situations which arise when they are not used.

The golf player loses interest in the game when he does not keep a record of

(Continued on page 215)

Farming Programs

C. L. ANGERER

Projects and Supervised Practice on a Farm

DON M. ORR, Teacher Education, Oklahoma College of Agriculture

IS IT possible that the persistent use of the term project has actually hindered the development of more complete programs of supervised farm training in vocational agriculture? School superintendents and other school officials often think that the spirit and letter of the Smith-Hughes law has been complied with if a boy has a project, any kind of a project, that is in some way related to farming. An outstanding feature of the project idea is the fact that it seems to limit or circumscribe the thinking and planning of teachers and pupils who might otherwise have splendid programs of supervised farm training.

This writer is not worrying about the definition or the exact meaning of the word project. He is thinking about "supervised practice on a farm."

Consider the situation of Paul, a boy who lives four or five miles from town on a 240 acre farm. The crops grown include barley, oats, mung beans, alfalfa, Sudan grass, lespedeza, rye grass, truck crops, a small orchard, and 125 acres of native grass pasture. The rolling land on the farm is terraced and most of it is planted to small grains and pasture crops. All feed crops are fed to animals on the farm.

The following livestock were on Paul's farm last year: five sows and their increase, 20 Hereford cows and their increase, one Jersey cow and calf, two work horses, and 125 hens. A tractor and the necessary equipment for farming with a tractor were available. Paul's father has a farm shop equipped with tools for carpentry work, soldering, tool grinding, and tractor repair. Electric power is available for an emery wheel, a water pump, a washing machine, electric lights, and a refrigerator.

Paul is a normal, healthy boy 16 years old and takes an active part in all farm work. Paul's father and mother are very much interested in him and believe that vocational agriculture is a good thing for Paul. Paul is seriously interested in becoming a farmer.

Let us follow an apparently common procedure. Looking at the reports teachers have to make and studying the project books pupils have to use suggests that Paul should have a productive project. After some consideration of other enterprises, Paul and the teacher decide on a swine project. It might have been a pig fattening project or a gilt, but the principle is the same. It is a piece or a part of a normal enterprise on the farm.

The gilt or two that Paul selected (really the teacher selected it for him)



Don M. Orr

might have been kept in a pen away from the other hogs. Such isolation is supposed to afford a wonderful opportunity for the development of managerial ability on the part of the pupil and make possible the keeping of accurate records. But Paul's father is a practical man and saw no reason for keeping the gilts in separate pens, so they remained with the rest of the herd. Consequently, Paul's records were only estimates of feed consumed and labor required. But estimates are not unusual in reporting productive enterprise projects.

After Paul has chosen a swine project, he must, if standard practice in project procedure is followed, have some kind of a feed project. Since there is corn land on the farm and the father is willing, Paul and the teacher decide on a two-acre corn project. Of course the corn acreage allotted to Paul will be raised to four acres next year, seven the next and 12 the fourth year. Certainly, none of the corn Paul might grow will be available for Paul's hogs until about a year after the swine project starts, but the corn listed for this year will look good on his record and make it appear that he has a well-balanced program. Paul, like any normal, healthy farm boy, will help with all phases of corn and pork production on the home farm. But apparently that does not count for much. Paul must have productive projects on which to keep records.

The limiting factor in the common procedure outlined above is the fact that Paul is not launched into a training program that is designed to give him eventually farm experience in the normal production of corn and pork on the home farm. His supervised practice is based on parts of enterprises and other artificial arrangements, and therefore his study is not motivated by a natural setting of farm problems. His thinking, study, and work are circumscribed by the project idea.

Let us consider other phases of Paul's supervised farm practice program. After a boy has made a selection of productive projects, the standard procedure appears to be to select one or more improvement projects. Of course, Paul does not know what an improvement project is, and the teacher is not able to help him very much. But the teacher and Paul cast about for something and hit on the idea of the improvement of home grounds. That sounds good and yet is general enough to include most anything from scattering a little manure around the rose bushes or straightening the yard gate to a carefully planned program of landscaping the home grounds. But that is only one improvement project and, in accordance with common practice, Paul should have several. After due deliberation, Paul and the teacher decide on livestock improvement. That is another generality that in supervised practice reports may vary from treating a dogie for warbles to buying and

using a purebred bull.

The reports that teachers have to make imply that Paul's supervised practice program is not complete unless he includes supplementary farm practices. The teacher's understanding of supplementary farm practices is a little vague, and as a result Paul's program of supplementary farm practice is a hodgepodge of farm jobs and chores that does not indicate a program of learning experiences that accomplishes anything in particular.

Paul's experience is not unusual. In fact, it is so common that we wonder if it is not time to drop the project idea and give "supervised practice on a farm" an honest trial. Real supervised practice on a farm would eliminate much of the concern and worry about artificial situations created by the generally accepted idea of projects and project work. If a boy is to be trained for proficiency in farming he needs to work with farm enterprises in their normal setting on a farm, not with segments of enterprises on which he keeps a set of estimated or guessed records.

Since Paul has had considerable experience on a good farm, his program of supervised farm training could start with learning to do rather advanced operative jobs of major enterprises on the home farm. It is possible that he would include in his program a number of minor jobs or skills that he may have missed along the way. Perhaps it would not be long until he could assume full responsibility for most of the operative jobs on some enterprises. As he matured he likely would be given an opportunity to assume managerial responsibilities. Since Paul's father is a comparatively young farmer he is not ready to turn the farm over to the boy. But Paul could learn much about farm organization and farm management by working with his father and studying under the direction of his teacher.

Certainly it is desirable for a boy to have ownership of animals or crops, if ownership is convenient and desirable in the arrangements that can be made on the home farm. The boy's ownership might start with one or two animals or a few acres of crops and gradually increase as he matures. He may eventually have the income from one or more enterprises or a partnership in the home farm business. But surely the boy's motivation for study and opportunity for a comprehensive program of supervised farm practice should not be limited by the number of animals or acres of crops he may own. In most instances the ownership of crops or animals should be incidental to the program of supervised farm practice.

We do not question the advisability of teaching boys to keep farm records and accounts, but the records should be on a normal farm enterprise, not on an artificial setup. The first records included in a boy's supervised farm practice work may be very simple. The first records kept may be determined by the maturity of the boy and the time he has for record keeping. As he learns and matures he may assist with or assume responsibility

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Where Shall We Serve?

WHEN this most terrible of all wars has been won and historians have closed their pages on the most sordid story ever permitted to unfold by so-called civilized nations, no man, no group of men, will have served their country more valiantly than those heroes who have grappled with the exponents of Naziism in the front lines of battle. No one could describe the importance of the task of those men who have risked all, and in many cases given all, to help destroy the forces that sought to tear down those things which for generations the United States and her Allies have tried to build for the welfare of mankind.



Watson Armstrong

No one could speak other than to praise the importance of the job the men in combat have done and are doing to help bring the earliest possible end to the present conflict, nor could one compare the importance of the many tasks which all the peoples of the Allied Nations are doing in this mighty effort. No one could overestimate the importance of the service being rendered by the men and women who work at the production lines of our factories in turning out the war materials so sorely needed. But just as we must have fighting men and implements of war to meet the armies of the Axis, so must we have food, supplies, skilled craftsmen, and people in all types of activity, giving their very best effort to supply our men on the battle front as well as the people on the home front.

A Teacher Resigns

Recently a state supervisor of agricultural education received a letter of resignation from a teacher of vocational agriculture. In the letter this teacher explained that he felt that he should give up his job so that he might enter a war industry and thereby render a more important service to his country. The teacher explained that he realized that this would leave his department vacant for the duration, but indicated that he felt it important that he identify himself more closely with the war effort.

No one would question the importance of people making sacrifices to enter the armed forces of their country or to take their places on the production and assembly lines of the factories turning out the materials of war. No one would question the patriotism of the millions of men and women who have taken such steps and who, in many cases, have left not only their jobs but their homes and families, to render these necessary services. At the same time, a nation involved in a crisis such as the present conflict must have earnest and sincere persons engaged in a vast multitude of services if the conflict is to be brought to an early and satisfactory conclusion. A comparison of the importance of the many necessary jobs is both uncalled for and futile.

Many teachers of agriculture have entered the armed forces and war industries of their country and, often, rightly so. At the same time, other teachers of vocational agriculture, while considering such steps, may well pause to appraise their present situations. Let's take a look at the teacher in question. This teacher of agriculture was one of two in his county. The county is located in what might be called a general-farming area. It has 3,300 farms. These farms produce a wide range of crops, livestock, food, and fiber. In an average year it produces approximately 1,245,000 bushels of corn, 100,000 bushels of wheat, 27,000,000 pounds of milk, 65,000 dozen eggs, and other farm products in proportion. Farming efficiency in the county is probably about average for the area. Many farm practices are carried out inefficiently; many approved practices are not carried out at all. To state it mildly, production is far short of what it should be. The opportunity to increase the efficiency of the farms of the county and to increase the total production of needed war materials is great.

What He Might Have Done

A few simple calculations give an interesting picture of some of the things this teacher might have done to help with the war effort right in his home community.

Corn yields in the county averaged 28 bushels per acre. If an average, and not unreasonable, yield of 50 bushels could be attained, total corn production in the county would be increased by 986,000 bushels. The average wheat yield in the county was 13 bushels, less than half of a conservatively good yield. A yield of 30 bushels, certainly not beyond reach, would add more than 130,000 bushels to the total county production of this important crop.

Milk, one of our most critical food items, is produced in this county by cows averaging but little over 4,000 pounds. With good cows and good dairy practices, 6,000 pounds would certainly be conservative production and would still not be satisfactory to top dairymen. But even with a 6,000-pound average, the cows in the county would add 13½ million pounds of milk, an increase of 50 percent, to the county's yearly total.

Hens in the county produce the far too-common total of 70 eggs per year. The same number of hens properly fed and reasonably well cared for, would lay at least 150 eggs. With the not unreasonable average of 150 eggs, 744,000 dozen would be added to the county's annual egg production.

These examples illustrate the point. Similar and possibly even more-convincing figures might be made for beef cattle, swine, sheep, and other important enterprises in the county. Assuming that each of two teachers of vocational agriculture in the county served approximately half of the farmers, we see what this man might have done to help add to our nation's food supply.

Should He Have Gone?

This man was already *close* to the war effort. He was already engaged in a critical occupation. He did not need to go half way across the land to find an opportunity to serve his country.

In addition to working with adults, this teacher was working with a large group of boys who are rapidly growing into the next generation of farmers. We see that the teacher's opportunity to serve his country now and in the future looms larger still.

Food, we have been told, will win the war, and be a respected factor at the peace conference. Considering the possibility that it may take considerable time to win the war and the assured fact that it will take time to win the peace, our figures for one year, and thus our teacher's opportunity to serve his country, may be multiplied many times.

Serve our country we shall—all of us. Serve our country we must, to the full limits of our capacity and our ability. But each person can serve his country only according to his ability—native ability and training and experience. The place of this teacher of agriculture in his country's service *may* have been found on the farms and in the homes of his community, working with his farmers, young and old, helping them to increase the production of the war materials so critically needed by their country, his country, our country. W. A.

From the Editor's Desk

From a limited experience of only two months behind the editor's desk I am giving you a few facts about the time schedule and sharing with you some of my problems.

Copy is submitted the 27th of the month and the magazine will be mailed two months later, a few days prior to the first of the month of its issue. These facts are of importance to you readers as contributors of seasonal copy. For example, as I write this, I am in need of copy for the July issue. What would you like to read about in July? Summer camps, summer activities in the supervision of farming programs, travel trips are suggestions. To provide such reading, copy should be written not later than April 1st and, if it should be crowded out one month by a better article, it should have been written another month earlier. Thus the difficulties in preparing *seasonal copy*. Contributors are asked to give it thought thruout the year.

The magazine is as good as its articles. The editor's judgment, of course, enters into the choice of articles, but his choice is limited to the articles submitted by his special editors. They, in turn, are limited largely by the contributions which the subscribers send to them. During my brief experience, there has been a wealth of articles dealing with farm mechanics, farmer classes in machinery repair and methods of teaching these classes. So, not all articles submitted could be used, but it is only by having a choice that a better magazine can be issued.

Concerning the quality of articles, the range is wide, too wide in fact. The best articles are an editor's delight. The poorest articles—well, some Future Farmer news reporters really could do better. My suggestion to such writers is that they submit their articles to their teachers of English for editing. May I express the hope that articles written in poor style will only occasionally find the editor's desk.

I would like to respect geographical distribution of the contributors but this definitely depends upon the number and the quality of articles submitted. I must use the best. So with your forethought and assistance may I have your contributions—seasonal articles, articles high in quality of content and of preparation.

WATSON ARMSTRONG

Farmer Classes

W. H. MARTIN

Employer Training Classes

FRANK A. MADASKI, Teacher, Whittemore, Michigan

WHITTEMORE, Michigan, an incorporated city of 400 people, is the location of the Burleigh Township Rural School. Whittemore High School, as it is locally known, is situated on the edge of the crop, livestock, and forage producing area of Northeastern Michigan.

1942 Program

The usual labor supply, including Mexican, was greatly reduced in the Summer and the Autumn of 1942. Local farmers were forced to appeal for assistance from the public school. In spite of the emergency character of the appeal the high school was able to give real help. Pupils harvested over 500 tons of sugar beets in a three weeks period. School busses were used to transport the pupils. They were always accompanied by the teacher of agriculture.

Guided 1943 Program

As the 1943 harvest season approached, the Advisory Council met for the purpose of drafting a workable labor policy for their proposed school program. In Michigan this council consists of representative farmers, the superintendent of schools, and the teacher of agriculture. The council formulated an informative letter to be sent to the parents of school children. The letter was mailed from the superintendent's office. It read:

**Burleigh Rural Agricultural School
Whittemore, Michigan**

Dear Parents:

War emergency conditions have made labor a scarce article and harvest time finds our local farmers badly in need of assistance. From now until the first of October, the school children will be called to help farmers in the fields. And, it is really a patriotic duty to respond to such a request regardless of the pay. If these crops are not harvested in time, armed forces and civilians alike will suffer from a lack of foods.

An organization has been set up on a nationwide basis to clear all requests for such labor thru the schools. Already requests are coming in.

To care for this need, we have established the following policies to govern our school's contribution in the crisis:

1. No child will be allowed to work in harvest fields under this program for more than one day at a time. If he works in the fields today, he must be in school tomorrow. In other words, we will allow him an excused absence every-other day to work on this program.

2. No child will be sent to a farm unless the owner has contacted us in advance and received specific instructions as to the care and supervision of the youngsters.

3. No child will be sent out unless definite arrangements have been made in advance for transportation to and from the farm.

4. No child will be allowed to participate in this program thru the school until the parents have filed written permission with us allowing him to do so.

Sincerely,

Superintendent of Schools

(Detach the following slip and return it if you are willing to let your children participate)

Mr. Madaski:

You hereby have my permission to allow..... to participate in the school-sponsored fall-harvest program.

Signed:.....

The council agreed also that farmers be offered an employer-training program. The farmers agreed to attend Employers' Training Classes. The instructional meetings were planned for three sessions of three hours each. One series of meetings was provided for those engaged in diversified farming, and a second for specialized farmers. In view of the fact that this whole project was a new experience for all of the farmers in the area, they were surprisingly co-operative and interested. The farmers contributed freely of their experience and knowledge to make the meetings a success.

The farmers who responded to this co-operative school plan for harvesting crops had been contacted by the teacher of agriculture during the summer. Others were members of the Agricultural Council or had been contacted by letter. The response was almost overwhelming.



Youth learns the "why" as well as the "how"

Once the labor program was under way, there was more demand than could be supplied. The units of instruction were as follows:

Lesson Outlines

The First Meeting:

1. The position of the school in the labor program.
2. Transportation of the workers to and from the job.
3. Notifying the school of the need for help and the type of worker needed.

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Whittemore, Michigan, boys get valuable experience when the farmer understands their problem

Good News From an Evening Class

ROBERT ZINN, Teacher, Varna, Illinois

THE Varna Farmers' Swine Production School started its series of 10 weekly meetings in January, 1943. This school, like hundreds of others in Illinois, was set up as a war production school under the RWPT program.

As the school progressed and the discussion leader became better acquainted with the men, it occurred to him that there were still many things about these men he didn't know. Two survey forms were worked out and presented at the last session. On one form the member placed his name, while on the other there was no identification. The first form follows: Name.....

- I. I would like to have the teacher visit my farm
 1. Not at all—(0)
 2. Very little—(0)
 3. Once a year—(1)
 4. Every 3 months—(6)
 5. Once a month—(6)
 6. Often—(49)
- II. I would like to see our group do more of the following during the year, if conditions permit
 1. Tour of our members' swine herds—(16)
 2. Visit some outstanding swine herd—(28)
 3. Tour of the University of Illinois—(33)
 4. Visit the agricultural experimental laboratory in Peoria—(21)
 5. Have a group picnic and get-together this fall after rush work—(47)
 6. Fill in any other ideas—(None)
- III. I would like to have the following topic for a school next year
 1. Dairy—(13)
 2. Beef—(13)
 3. Poultry—(7)
 4. Corn borer—(4)
 5. Crops—(4)
 6. Miscellaneous farm practices—(4)
 7. Sheep—(3)
 8. Swine—(3)
 9. Tractor farming—(3)
 10. Crop diseases—(2)
 11. Seeds—(1)

The answers given under sections I and II are significant. Under I the desire of these men to be contacted on their farms by the instructor in agriculture is emphatically recorded. This is a situation which teachers of agriculture have been told has existed for a long time. The survey confirms this opinion. It may be assumed that similar results would be secured in other communities. The situation disclosed is highly desirable as it opens wide the doors to teachers working with farmers on their farms.

The answers given under II show that these men were not looking upon the school as a winter pastime, but as something with a definite and continuing value, both socially and educationally. When a group comes together and continues to meet of its own volition, the possibilities of further work with that group are limitless.

Section III brings out the diverse interests of this group. From such varied interests the problem of what to teach in the future will be solved.

The second survey, the unidentified copy, gave information summarized as follows:

1. Age—15-19 yrs.—(19); 20-29 yrs.—(6); 30-39 yrs.—(19); 40-49 yrs.—(17); 50-59 yrs.—(8); 60-69 yrs.—(3).
2. Owner—(13).
3. Renter—(43).
4. Size farm—80-160A—(19); 161-240A—(21); 241-320A—(17); 321-400A—(2); 401-480A—(3); 481-560A—(0); 5 blanks.
5. How long have you farmed? 1-5 yrs.—(8); 6-15 yrs.—(16); 15-25 yrs.—(21); 26-35 yrs.—(6); 36-45 yrs.—(2); 14 blanks.
6. Are you a farm bureau member? Yes—(46); No—(10); 10 blanks.
7. Distance traveled to this school—1-2 mi.—(19); 3-4 mi.—(29); 5-6 mi.—(8); 7-8 mi.—(4); 16 blanks.
8. Were you ever a 4-H club member? Yes—(15); No—(48); 3 blanks.
9. Were you ever an F.F.A. member? Yes—(11); No—(50); 5 blanks.
10. Did you ever study vocational agriculture? Yes—(17); No—(42); 7 blanks.
11. Do you have a child in 4-H? Yes—(14); No—(44); 8 blanks.
12. Do you have a child in the F.F.A.? Yes—(11); No—(47); 8 blanks.
13. Do you have a child studying vocational agriculture? Yes—(7); No—(49); 8 blanks.
14. Have you ever attended a farmers' evening school before? Yes—(40); No—(20); 6 blanks.

In Summarizing Our School Please Check Blank Below Which You Think Most Nearly True

- I. Value of meetings to me—
 1. None—0
 2. Low—1
 3. Medium—14
 4. High—40
- II. Would you like to see another school held next winter?
 1. Yes—63
 2. No—0
- III. Have our meetings held for you—
 1. High interest—54
 2. Medium interest—6
 3. Low interest—1
 4. No interest—0
- IV. I believe our meetings could be improved by—
 1. Better co-operation
 2. Better attendance
 3. More discussion
 4. More order
 5. Not let school boys attend
 6. Start earlier in the year
 7. Start meetings earlier in the evening
 8. Have more eats
- V. Do you favor an attendance contest such as we had this year?
 1. Yes—51
 2. No—10
- VI. I prefer the meetings to be conducted by—
 1. The ag teacher—61
 2. Some outsider—1
 3. Some local men—0
- VII. Have our meetings been—
 1. Too short—6
 2. Too long—0
 3. Right length—56
- VIII. The instructor should—
 1. Talk more—30
 2. Talk less—2

3. Ask more questions—29
4. Ask fewer questions—0
- XI. The instructor uses the blackboard—
 1. To good advantage—55
 2. To poor advantage—0
 3. Too little—5
 4. Too much—0
- X. The instructor should make assignments for study—
 1. Yes—30
 2. No—30
- XI. The instructor should hand out papers and bulletins
 1. Yes—63
 2. No—0

The following are significant observations: First, about one-third of those attending had been reached by no other educational agency. In a democracy such as ours, education is available to everyone, yet we constantly find many people who have not availed themselves of this opportunity. Why? Perhaps it is because the type of education offered isn't wanted. If this is the case then teachers of vocational agriculture, and all other teachers, are faced with the challenge of presenting a program of education that will be of such interest to their patrons as will draw them out and hold them. Second, two-thirds of the members had no connection whatsoever with the department thru boys studying vocational agriculture. This suggests that a great share of our population is untouched by our high schools. When teachers of vocational agriculture can attract those of the rural people who have been passed by before, they will be making strides toward the development of well educated rural people.

If at any time those of us working in vocational education in agriculture feel that we are fighting a losing fight or are attempting to force a service upon our patrons which is unwanted, let's stop long enough to find out their reactions to what we are doing. Such time will probably be well spent as it likely will reveal that, instead of presenting unwanted services, we are unable to present as many services as these farmers desire.

War Effort

At Fort Cobb, Oklahoma, farmers have repaired and rebuilt more than 180 pieces of vital farming equipment (including 57 tractors, 30 listers and 20 peanut threshers), in the farm machinery course. F.F.A. members also assisted with the repair work. The Future Farmers built their chapter a four-wheel, rubber-tired trailer with a 14-foot bed and extra high sideboards at a total cost of only \$35.

The farmers also built a total of 116 machines new and complete, using only scrap metal and what spare parts were needed and available.

Supervised Practice

(Continued from page 208)

for keeping a complete set of farm records and accounts on the home farm or any farm on which he may be working.

Projects and project programs have made a contribution to the development of vocational education in agriculture. But projects and the generally accepted idea of project work have been responsible for much of our supervised practice work being undersized and artificial. Is it not time now for us to consider a broader program of supervised practice on a farm carried on in its natural setting?

Farm Mechanics

R. W. CLINE

Some Objectives of Farm Mechanics in Schools of Vocational Agriculture

S. H. FOOTE, Teacher Education, Virginia Polytechnic Institute

THE importance of farm mechanics has seen a tremendous increase in the last two years, due to the impact of war conditions on demands of farmers for increased production in all lines. Faced with the labor shortage, the farmer has been asked to increase his production in spite of the fact that very little new machinery was being allotted to him to replace the labor that he had lost. He was immediately interested in two things: improved practices in growing crops and animals, and ways in which he could make his old machinery continue to function.

As the machinery need was most pressing at the time, we recognized the importance of it and set up in our rural high schools "defense classes." These defense classes were designed to teach the farmer how to keep his machinery in repair thru the medium of specialized courses in various subjects such as metalworking, woodworking, trucks and tractors, and elementary electricity. Upon our active participation in the war, these defense classes were replaced to a large extent by the Rural War Production Training Program. This program acknowledged the need for new courses in crop and animal production as well as continuing the work in machinery repair. We see our rural schools becoming more and more truly community centers and as a result, the teacher of vocational agriculture now has an opportunity to increase the scope of his teaching. It is more than ever necessary, if he is to take advantage of these contacts, for him to formulate a very definite set of objectives. In the field of farm mechanics, he must remember that first and foremost his objective is to teach: *"To teach farmers and prospective farmers to use the tools and methods that they may reasonably be expected to use in doing their own farm and home construction, repair, and maintenance work."* This statement, we feel, needs some explanation, and for the sake of simplicity we divide "farm mechanics" into two broad categories; namely, shop practice and field practice.

Shop Practice

Under the shop practice heading, we think that our all-day boys and our adult groups, as well, should have practice in the following types of work:

Tool Fitting

This practice should include the maintenance of all our common hand tools such as saw fitting, sharpening edged tools such as chisels, plain irons, and axes, and the fitting of handles in such tools as hoes, shovels, and rakes.

This article by Professor Foote probably presents the point of view typical of farm mechanics in those states which have recently been enabled to develop their shop programs. Other states have conducted extensive programs in farm mechanics for 20 years, employing one, even two, full-time instructors maintaining shops with floor areas exceeding 5,000 square feet and equipped with traveling cranes, complete blacksmith equipment, auto hoists, and facilities for acetylene welding. To them, the contents of this article will be very elementary. Will the "veterans" in these states please be patient while the younger programs mature?

Painting and Glazing

As long as we continue to use paint as a protective coating on farm implements and buildings, we should teach the methods of selecting and applying the proper paint to the surface to be protected. As long as we continue to use glass or glass substitutes to admit light, we should teach the methods of cutting and applying this glass.

Woodworking

As long as we continue to use wood in construction of farm buildings and implements, we must teach the use of the woodworking tools with which a farmer can construct and maintain the farm structures and implements.

Cold Metal Work

Iron, steel, and other metals are so widely used by the farmer that it is essential for him to know the proper use of the various cold metalworking tools such as taps and dies, cold chisels, wrenches, and hammers. Pipe fitting also falls under this classification.

Harness Repair

Even tho the labor of horses and mules has been replaced to a large extent by internal combustion engines in the past 20 years, there are still very few farms that do not have some work animals, and these animals are constantly wearing out and breaking harness.

Soldering and Sheet Metal Work

The pails and buckets on a farm must be repaired as well as the twine cans and

aprons on binders and other field machinery. At least an elementary knowledge of sheet metalworking is required here.

Rope Work

The tying of the ordinary knots and the making of rope splices will always be important, but especially so in regions where large quantities of hay are being put up.

Elementary Electricity

The extension of rural electric lines and the constant invention of new methods of using electricity brings this source of power into more and more intimate contact with all our lives. Some understanding of the principles of application of this power is essential to the farmer today and will be much more so in the future. Jobs such as the construction of simple circuits, equipment, repairs, etc., should be taught.

Internal Combustion Engines

Methods of making the simple repairs such as valve grinding, tappet and brake adjusting, and the ordinary service jobs such as lubricating, adjusting spark plug and distributor parts, etc., should be the basis of this type of instruction.

Arc and Acetylene Welding

For quick and permanent repair of all metals, the past five years have seen tremendous strides in the development of arc and acetylene welding technique. These practices have become commonplace, and many of our larger farms now have this equipment.

This list of shop skills is fairly comprehensive in its broadest sense. There are subdivisions of these skills which might be added to fit local needs. The teacher of farm mechanics must adapt them to the individual needs of his all-day students, his young-farmer groups, and his adult groups if he is to do the necessary job of teaching farm-shop work as it has been defined.

Field Practice

The other category of farm mechanics which is field practice should include such work as may properly be called farm mechanics, but which is primarily done outside of the shop. As an arbitrary classification, we shall think of this as field practice.

In the field of permanent construction, there does not appear, at the present time, to be anything which will replace the concrete and masonry which the farmer has always depended upon for his footings and foundations, his walks, driveways, etc.

As our farmers become increasingly aware of the dangers to our valuable top soil thru erosion, it has become necessary for farmers to plan their crop rotations and their tillage practices so as to control this erosion. The specialized ma-

chinery which has been developed to take care of this problem requires some specialized knowledge in its use and maintenance. Land drainage and supplementary irrigation are important practices in many localities. The use of surveying instruments is an important skill necessary in the laying out of terraces, drainage and irrigation systems, etc.

The promotion of recommended tillage and harvesting practices thru the proper selection, adjustment and maintenance of tools, implements, and farm machinery is in itself a broad field for instruction.

The construction of the ordinary farm buildings such as barns, garages, poultry and hog houses are the essential jobs under this sub-division. The elementary procedures under this classification such as the squaring of the foundation, cutting rafters, and planning efficient use of floor space are important.

As every farm must supply water for its home, family, and animals, there is on every farm a more or less complicated problem in this respect, and also in the removal of waste products in the form of sewage. A wise selection of the proper installation of these facilities contributes much to the ease of farm work and the joy of farm living.

Program Large

In outlining these objectives in farm mechanics for the teacher of vocational agriculture, it may seem that we have taken in a more inclusive list than is practicable. They are all so closely related, however, that we feel that to remove one would also have a bearing on the promotion of another. At the present time, in Virginia, we are definitely on our way to the attainment of every one of these goals in our teaching of vocational agriculture. We have some departments that are definitely attaining the goal in shop work. We have other departments which are doing a very creditable job in the attainment of the field practice objectives. We have some departments, and these generally employ more than one teacher, that are started on the way to reach these objectives in both shop and field practice.

Methods

The time may come when many of our departments of vocational agriculture will employ two teachers. One of these teachers will be a man who has specialized in farm mechanics and who is equipped by his training to handle instruction in this subject primarily. He must then set up a course of study which will serve the members of his school patronage area in the attainment of such of these objectives as are essential to the

farming of that community. He may add others to meet his needs more fully. His methods in field practice will consist largely of demonstration and practice as they will also in the shop work. In this type of work, the two ever present dangers of vocational teaching that have always confronted him will still be present. He must continue to be a teacher and not a service man. He must constantly be alert to the dangers of exploitation of student labor under the thinly guised veil of practice. In promotion of his shop objectives, the much worn bone of contention as to whether the teaching of skills, or jobs, are the most efficient method will probably arise. By our arbitrary definition of farm mechanics we state that we must teach the use of "tools and methods." Translated to the language of the learner, this might be called "means and ways" and to translate back into educational language "means and ways" are skills and jobs respectively. The job itself being, in this case, a device of instruction to engage the interest and participation of the pupil in learning the necessary skills.

Farm Shop at Home

We are proud of the part that our departments of vocational agriculture in the rural high schools have played in meeting the demands of the war program in the field of farm mechanics. Our schools in the various counties are the local point for the county in the repair and maintenance of farm machinery. We think that the smaller repairs can be more efficiently done at home. For this reason, we have been promoting a "farm shop on every farm." Familiarity with the use of tools in our school shops has done much to encourage this movement as many of our farmers have discovered that it is possible for them to do maintenance and repair jobs that they never had considered themselves capable of doing previously. If we could reach the goal by having a farm shop on every farm in our community, we still would not lose our valuable contact with these farmers; and our shops will always remain community work shops because of the specialized tools such as lathes and arc and acetylene welding equipment with which very few of our farm shops are equipped.

In response to the immediate necessities of war production, we started a movement which we feel is now a permanent part of vocational agriculture in this state. This movement, while serving immediate needs, also laid a groundwork for future educational service which will continue to grow according to the demands of the community and the ability of the teacher in meeting these demands.

Then she arose and he seated himself. The teacher then talked informally about banquet procedure—arranging and using the napkin, serving yourself, using the utensils—forks, knives, and spoons—drinking from glass and cup, and similar situations.

In each case the approved procedure was justified, insofar as possible, by its contribution to the desired objective of meal service as a social situation. With the "whys" known, the boys were able to appreciate the so-called rules of etiquette. They voted it one of the best meetings of the year.

Postwar Planning

(Continued from page 205)

3. There should be a definite program of instruction in vocational agriculture for out-of-school youth from 18 to 25 years. Included in this program should be instruction for young women as well as young men. For this program, it will be necessary to establish departments of vocational agriculture especially for out-of-school youth and adults as well as departments in which the instructor divides his time between in-school and out-of-school persons. Instruction will vary all the way from individual instruction given on the home farm to a series of classes conducted all day one or two days a week for from one to nine months.

4. There should be a program of adult classes to meet specific problems of farmers. These classes will, for the most part, be evening classes altho in some cases day classes would be held. The length of the units will vary with the instruction given.

5. Some plan will, of necessity, be developed which will provide instructors with better practical experience than we now have. It may be that the only way this can be done will be to hire practical farmers of the community to conduct classes. Unless a different salary schedule is developed, it will be impossible to secure as full-time instructors men who have had favorable experience in farming. It would seem certain that, for many of the vocational classes at any level, teachers will be hired on the basis of their practical ability and the instructor in agriculture will act as a supervisor of the program in a manner similar to that now employed in the Food Production War Training Program.

6. The Future Farmers of America should be developed as the best possible agency to provide leadership training for students of vocational agriculture under 25 years. We claim that this organization is the most outstanding organization for the development of members and leaders of rural organizations. However, in Wisconsin probably 40 percent of the farm boys do not go to high school at all. There are undoubtedly unfavorable percentages in most of the other states. We must now say to these young men, "While the Future Farmers of America is the greatest training organization there is for farm youth, since you have been deprived of the privilege of going to high school, you are also barred from membership in this organization." Membership should be open to all young men under the age of 25 years, who enroll either in high school or young farmer classes in vocational agriculture.

7. There should be developed a course in agricultural education for all rural high-school pupils and most urban pupils. Perhaps this point should not be included in any discussion of vocational agriculture because such a program would not be vocational. There is a continually growing need, however, for an appreciation of the economic and social problems of agriculture by non-farm people and a course planned for the development of such an appreciation is desirable. This might be called Rural Living rather than Agriculture. In most cases, it could not be taught by the instructor in vocational agriculture because of the load he already would have, but it might be taught by a science or social science instructor with a farm background.

A Valuable Evening

The teacher of home economics was the guest speaker at the F.F.A. meeting on this occasion. No information was given as to the subject of her talk. When the number was announced, a small table covered with a spread was brought in and the spread removed. There was displayed a complete table service for one person—plate, knife, fork, spoons, glass, cup and saucer, and napkin. One of the boys, previously coached, was asked to seat his "girl friend," in this case the teacher of home economics. He did so properly.

Studies and Investigations

E. B. KNIGHT

How Teachers Assist Young Farmers to Increase Their Net Worth

W. H. WOLF, Supervising Teacher, Ohio State University

ONE ambition of a farmer is to own his farm and have it satisfactorily equipped for farming and for living. Advancement on the agricultural ladder has as one of its requisites, the accumulation and progressive expanding of the individual's resources. These resources or assets may be in the form of cash, livestock, feed, equipment, or land which we call net worth after outstanding liabilities are deducted. Under ordinary conditions the accumulation of the necessary net worth requires years of careful planning and hard work for the young men to aspire to reach the top rung of the agricultural ladder. Helping young men to attain their farming objectives is a part of the job of teachers of vocational agriculture.



W. H. Wolf

The purpose of this study is to determine the procedure used by selected teachers of vocational agriculture in Ohio in assisting young farmers to increase their net worth and also to learn some of the characteristics common to those young farmers whom the teachers feel they have assisted in increasing their net worth.

The data for this study were secured by the author in interviewing privately 64 young farmers and 20 teachers of vocational agriculture in Ohio. The schools were selected by the supervisors of vocational agriculture in Ohio because:

1. The teachers concerned had superior ability in assisting young farmers to become established in farming;
2. They had taught a short course during each of the past four years;
3. They had been employed in the same same schools for the four years mentioned.

The 64 young farmers selected by the teachers possessed the following qualifications:

1. They had been out of high school since the spring of 1937;
2. They had attended short-course instructions for at least four years;
3. They were not younger than 21 years of age nor older than 35 years;
4. They had been helped by their teachers of vocational agriculture to increase their net worth.

During these private interviews the teachers were asked to indicate the helps they felt were responsible for an increase in each of the young farmer's net worth in the four year period. Likewise, the young farmer was asked to estimate his present net worth and the nature and

financial effect of the various "teacher helps" in the four year period.

Analysis of Help Received by Young Farmers

Certain farm practices such as improved feeding of livestock were used in more than one enterprise. When all the improved feeding and other similar improved practices were combined, the improved practices most frequently reported by the teachers and the young farmers were: improved feeding of livestock, improved breeding of livestock, improved seed of crops, controlled parasites and diseases of livestock, improved machinery, improved pastures and legumes by liming, planned rotations, and conserved fertility. The specific improved practices that were reported most frequently by the young farmers and teachers are: improved feeding of pigs, improved seed corn, improved feeding of cows, improved breeding of dairy cattle, controlled diseases and parasites of swine, improved fertilizing of corn, limed legumes, improved marketing of swine, improved feeding of chicks, improved breeding of chicks, and improved feeding of the laying flock.

Eight hundred and twenty-one helps were received according to the young farmers, or an average of 12.8 helps per individual. The teachers reported giving 806 items of help to the young farmers that resulted in an increased net worth to the young farmers. The enterprise which received the most help in the opinion of the young farmers, as measured in percent are: swine, 26.5 percent; dairy, 11.2 percent; poultry, 10.8 percent; corn, 9.3 percent; wheat, 5.6 percent; hay and legumes, 5.1 percent.

Teachers and young farmers were in agreement on 56 percent of the improved practices that assisted the young farmers to increase their net worth. In many selections the teachers and young farmers agreed on the enterprise that was improved but not on the exact practices. There were some differences between the young farmers of the northern area and the southern area of the state in that improved practices in sheep, legumes, and pasture were reported more often by the young farmers in the southern area, while swine, corn and wheat were given greater importance in the northern area.

Analysis of Amount of Help Received by Young Farmers

The net worth of the young farmers varied from \$400 to \$15,000 as of April 1, 1942. The mean net worth was \$5,050 per young farmer. They reported a mean net increase in net worth of \$201 due to

teacher help, with a range from \$260 to \$6,100. Young farmers in the northern area increased their net worth \$285 more per young farmer than did the young farmers in the southern area. Since the study includes the four-year period beginning April 1, 1938, and ending April 1, 1942, the agricultural selection may have been more favorable or unfavorable to these young farmers during the period than in other periods. Nevertheless, these young farmers did increase their net worth and attributed some of the increase to the help of their teachers.

Livestock furnished 56 percent of the total net increase in net worth of the young farmers due to the help of the teachers, and swine contributed 26 percent. The crop enterprise contributed 28 percent of the total and corn furnished 13.1 percent of all the help received. The mean value of the help given to young farmers by their teachers was \$155. Some improved practices that returned the highest increase in net worth for each teacher help were: improved breeding dairy cattle, \$240; improved seed corn, \$230; improved feeding beef cattle, \$225; improved feeding dairy cattle, \$220; improved legumes by liming, \$210; planned rotation, \$210; extended or introduced legumes, \$205; improved fertilizing corn, \$200; improved feeding sows, \$195; improved feeding pigs, \$185; conserved fertility, \$185; improved breeding swine, \$165; and improved feeding sheep, \$155.

Relationship Between Certain Selected Factors and Increased Net Worth

Sixty-one of the 64 farmers had a farming status that provided managerial opportunity with a definite share in the farm income. The mean age of the young farmers in this study was 25.6 years. The older young farmers increased their net worth more than did the younger group.

Teachers and young farmers were in agreement 75 percent of the time when rating young farmers on farming opportunity. Fifty-nine of the 64, or 92 percent of the young farmers, had an opportunity rating of "A" or "B" (considering five grade levels with A as high) according to the rating given by the young farmers. Young farmers with the "A" rating increased their net worth \$2,390 as compared to \$2,010 mean for the entire group.

Sixty-one percent of the young farmers in the study completed four years of vocational agriculture. The 64 farmers attended 79.6 percent of the young farmer instructional meetings during the four-year period included in this study. Increased net worth was associated with the higher percent of the meetings attended.

Procedure Used to Increase Net Worth

Table I shows the distribution, by number of improvements, brought about by the use of various teacher procedures. The opinions of both young farmers and teachers are shown in separate columns.

Table I. Procedures Used by Teachers to Increase Net Worth of Young Farmers

Procedures	Total for Each Method	
	Young Farmer	Teacher
Teacher discussed similar problem in class.....	743	695
Teacher discussed problem before or after class.....	424	417
Discussed problem on home farm.....	337	428
Teacher secured subject matter.....	258	167
Discussed problem after going to teacher.....	208	184
Teacher discussed young farmer problem in class.....	153	189
Teacher provided opportunity by interesting parents.....	124	62
Teacher assisted in doing job for the young farmer.....	109	90
Teacher took him on educational trip.....	81	96
Discussed young farmer problem at a chance meeting.....	60	99
Teacher persuaded him to take an educational trip.....	32	42
Teacher urged young farmer to confer with third party.....	36	23
Teacher arranged conference with third party.....	32	36
Teacher actually did job.....	23	35
Teacher had others do the job.....	12	14
Teacher had others assist young farmer to do job.....	12	16
Teacher provided opportunity by interesting others.....	7	13

Three and two-tenths was the mean number of procedures used by the teachers to affect the adoption of each of the 821 improved practices reported by the young farmers, according to both teachers and young farmers. An examination of Table I indicates that most of the help given to young farmers was brought about by the work of the teacher in the classroom. The procedures that are considered as work in the classroom are: "Discussed similar problem in class," "Discussed my problem before or after class," "Discussed my problem in class," and "Secured subject matter for me." Some of these four problems were used 1.9 times for each item of improved practices adopted by the young farmers. This study does not indicate that the classroom would be as effective as it seems to be with these young farmers if the other procedures used would be eliminated. Young farmers mentioned that 337 improved practices were effected by "Teacher discussed problem on home farm," while the teacher reported 428 improved practices effected. Thus young farmers gave less significance to teacher visitation than did the teacher. However, the young farmers attributed 124 improvements resulting from the procedure, "Teacher interested the parents," while the teachers reported 62 practices initiated by this procedure.

The teachers and young farmers were in agreement on 41 percent of the procedure used in effecting the various helps. The procedures with the highest percent agreement were those which required some manipulative effort on the part of the teachers or those which pertained to the classroom.

Recommendations to Teachers of Vocational Agriculture

Considering the significant findings of the study and applying them to improve young farmer instruction, the recommendations to teachers are as follows:

1. That teachers do a thoro job of organizing the classroom teaching for young farmer instruction basing it upon the needs of the young farmers
2. That teachers encourage young farmers to present their problems in class and that as many problems of young farmers as possible be considered
3. That teachers provide interest techniques in their classroom teaching.

That they add social and recreational features to the young farmer program so young farmers' meetings will be better attended

4. That teachers should secure appropriate subject matter to aid young farmers in solving their problems
5. That teachers visit the young farmers on the home farms at least four times a year. If fewer than four visits are made then call on the young farmers in the spring and the autumn
6. That teachers should secure a better understanding of young farmers' problems by systematically visiting the young farmers and thus become better teachers in the classroom
7. That teachers become well acquainted with the young farmers and win their confidence so that the young farmers will go to the teacher for help
8. That teachers indicate their willingness to go to the farms of the young farmers for a long visit and that they encourage other young farmers to ask for a long visit altho the young farmers will assume the responsibility in arranging for the visit
9. That teachers should give attention to the problem of the young farmers that may occur less frequently than others that could be taught, but which may increase the net worth of the young farmers more than the more prevalent problems
10. That teachers should follow the problems of the young farmers beyond the classroom
11. That teachers urge young farmers to make a beginning or an advance in farming now, even tho the initial or subsequent investment may be small
12. That teachers should continue their contacts with the young farmers that are beyond the conventional 16-25 age group . . . beyond the conventional 16 to 26 year group, and urge the adoption of new practices or at least introduce farm demonstrations.

The Editor Suggests

Why should there be a state organization of Y.F.A.? A state organization of Y.F.A. is not justified. Signal achievements of a Y.F.A. organization. Will you write your opinion?

Securing and Using Data for Diagnosis

(Continued from page 207)

his strokes which he can compare with his former records and with the records of others. A football game with no scores would be of little interest to the players or the audience and would probably be poorly played.

Some hold that farmers already know just where they stand and what their weaknesses are. Some farmers do, but it could probably be demonstrated that the most important factor holding up the development of greater efficiency and greater earning power in farming is a lack of knowledge of attainable standards in farming. Farmers are more or less isolated from each other. They judge their results by the results of their immediate neighbors; often these results are far below standard. If farmers understand clearly the attainable standards, why do so many persist year after year in producing 100 to 150 pounds of butterfat per cow, 50 to 75 eggs per hen, and 500 to 800 pounds of pork per sow? Once they clearly recognize the possibilities which are theirs, they can find the ways and means of attaining them; but until these possibilities are clear there will be no effort to improve ways and means.

The war has created a situation calling for much more attention to the efficiency of livestock. Animals at their best are inefficient in turning crops into human food. As the shortage of food increases, people will have to consume directly more of the products formerly fed to livestock. Some animals are much more efficient than others. We can expect that there will be rigorous selection of these more efficient animals during the next few years. Standards and records will be needed in making the selections.

The American farmer is the most efficient in the world in terms of *production per man*. We should not forget this criterion as we seek to increase *production per acre*, and *production per animal*. When land is plentiful and equipment is available, it may sometimes be more desirable to increase the scope of one's operations than to increase the production per unit. Commonly, however, production per man can be increased as a result of increasing production per unit.

Teachers of agriculture and the supervisors and teacher-trainers who work with them have gained a great deal of public favor in the past generation without having to show very definitely their accomplishments. The public has accepted the teaching of agriculture as a good idea which ought to be tried. It has been very charitable with us. But, if anything is clear, it is that the country is in for a great deal of "belt tightening" during the next few years. There is a rising inclination to eliminate some of our public agencies and to curtail all of them. Are we going to be among the survivors? We can easily be if we take the threat seriously enough and respond to it. We are in a strategic position to get results in terms of increased farming efficiency. But we are going to have to show these results. We should not delay longer.

We cannot abandon our education at the schoolhouse door. We have to keep it up thru life.—Calvin Coolidge

Future Farmers of America

A. W. TENNEY

Practices I Like to Follow

Assembled by L. R. HUMPHERYS, Teacher Education,
Utah State Agricultural College

OUR members are charged a fee of one dollar per year while the members are attending school. The fee for out-of-school members is 50 cents per year. Our chapter presents each Greenhand with an official F.F.A. manual at the time of his initiation.—*Friendsville, Maryland, Chapter*



L. R. Humpherys

Time for Chapter Meetings

Where students are transported to high school for any appreciable distance, it is almost necessary to hold chapter meetings during the school day. Our principal has been quick to see the needs of our meetings and has worked out a plan for holding them once a month on a rotating class schedule. In September, we hold our meetings from 9 to 10 o'clock; in October, from 10 to 11; and in November, from 11 to 12. In the fourth month the cycle is repeated. We have almost perfect attendance at the meetings and the boys look forward to participation. The boys are excused from classes on the particular day that the meetings are held.

Give the Boys Something to Do

I have found that the busy boy is the most interested boy. Consequently, it has been our policy to see that every boy in the chapter serves on one or more committees during the year. Even the lad with few capabilities now feels that he fits into the organization and tries his best to fulfill his obligations to the chapter by performing his job on his committee. By organizing the program of the chapter into separate activities, it is easy to have every member serve on at least one such committee during the year and to be responsible for the success of his assignment.

Training Officers

I believe the success of a chapter meeting depends upon how well the officers are prepared for the meeting. Each officer in our chapter is given to understand that he must have at his fingertips his part of the opening and closing ceremony by the time he appears at the second meeting. We have adopted the rule that, if his office is not of sufficient importance to receive due preparation, plenty of other boys are willing and ready to take over. During the past five years we haven't had occasion to replace a single officer because of lack of proper prepara-

Dr. Humpherys has assembled in this article some procedures which various advisers have adjudged important in the conduct of their chapter's program. The contributions cover a wide range of situations. If they are helpful to our chapters, other articles of similar content can be prepared.

tion. Our officers have a gentlemen's agreement that meetings must move along smoothly and that they, the officers, are responsible for the success of the meetings. To avoid any poorly conducted meetings, the presiding officer and the adviser hold a meeting two or three days in advance to check the agenda. All items to be taken up in the meeting are listed and posted on the chapter bulletin board for at least two days. The boys know exactly what is to be considered when the meeting opens.

All members of the Arcadia Chapter begin their training when they enroll as Freshmen in vocational agriculture. It has been our policy to spend approximately one week during the first month of school acquainting Freshmen with the F.F.A. organization, its purposes, membership, creed, etc. Knowing what is to be gained, they are willing to take the next step, become active members. It has been my experience that, if they have training in how to conduct meetings, they will be more active in meetings. Consequently, we spend approximately three days of this week on parliamentary practice, discussing the right and the wrong procedures. We try to give all of the freshmen boys a chance to act as chairman of the group for five minutes or more while other members are making motions, amending motions, etc. The boys are all graded in these activities on the basis of classroom response for the week. Perhaps this is an incentive to be active at least during this week of training.

When these young men attend meetings, they are not afraid to participate in discussions and in making motions. This procedure builds confidence. Confidence in turn builds prospective good officers and good active members.

Selecting Good Officers

During my teaching experience I have discovered that, unless plans are carefully made, the popular lad may easily be selected as a chapter officer. He is often the kind who doesn't have time to attend to his duties. We use a nominating committee consisting of the retiring officers plus three additional members selected by the officers. This committee, after

carefully examining individual records, nominates two or more members for each office. Usually the boys most capable of conducting meetings and performing other leadership activities are the boys who get the jobs. The nominating committee prepares its report for a spring meeting. The new officers spend the following weeks in meeting the old officers and preparing for their duties. They take charge of all summer meetings and activities and prepare for the grand opening at the September meeting.—*Arcadia, Wisconsin, Chapter*

Officer Training

The training of officers is taken up in regular class work in our chapter. The study of parliamentary procedure and how to acquire skill in public speaking constitutes a part of this training program. The training in parliamentary procedure is taken up every year that the boys are in high school. Every boy is expected to act as chairman of at least one class meeting or more during the year. By the time a boy becomes a Junior or a Senior, he has demonstrated to the class his leadership ability and the class members efficiently select the boys best suited to hold offices. The same procedure is followed in public speaking except that each boy is required to give reports on topics of interest throughout the year. This gives the boys confidence.

The appointment of Freshmen and Sophomores on all committees assists materially in developing officers for the years ahead. Participation in programs before farm and civic organizations tends to increase a boy's confidence in his ability to conduct a meeting.—*Forest Grove, Oregon, Chapter*

Developing Officer Material

The most important decision in Future Farmer activities is the selection of qualified officers. Without question the second important step is to develop the material to the highest potential of each individual. In our chapter we appoint assistant secretaries and assistant treasurers. The job of the regular secretary and regular treasurer then becomes largely supervision. Each officer has an apprentice. This plan has worked so well that we now elect assistant reporters and secretaries from each class in addition to the treasurers. This procedure gives experience to many more boys and provides an opportunity to demonstrate what can be done in a position of responsibility.—*Kalispell, Montana, Flathead Chapter*

Our chapter purchases old farm machines and implements. The boys who don't have anything else to do repair these machines which are auctioned off in the spring as a source of chapter revenue.—*Delta, Utah, Chapter*

"Uncle Sam" Deposit Box

Our chapter has a sealed wooden box, called "Uncle Sam," in which pennies

are placed when collected from chapter members as fines for being late or otherwise breaking some of the rules. The fines are assessed particularly from absent or tardy members and are used for the purchase of War Stamps.—*Fort Meade, Florida, Chapter*

A Substantial Chapter Budget

Our chapter officers definitely prepare to earn funds each year to promote the best interests of the chapter. The chapter members sell school supplies, candy, garden seeds, hybrid corn, and other supplies needed in the community. The funds derived from these and other sources were used to purchase a 16 mm. motion picture machine. Our chapter has approximately \$250 in the bank. We have purchased five sets of books, equipment for our chapter room, and a number of other worth-while pieces of school equipment.—*Centertown, Kentucky, Chapter*

Protecting Chapter Finances

Our chapter has made provision for the disposal of four \$100 War Bonds and others which it will purchase. In case the chapter is not in existence when the bonds come due, the superintendent and the principal of the Van Wert High School together with the High School Student Council shall have the authority to use the money as they see fit, but it shall be such an expenditure that it will be a memorial to the chapter and designated as such. Written authorization for disposal of the funds was signed by the chapter officers at the conclusion of school.—*Van Wert, Ohio, Van Wert-Marsh Chapter*

Improvement Projects

I like to think of improvement projects as a very important part of the program in vocational agriculture. Thru this type of project we are able to extend our teaching and programs to every enterprise on the farm.—*Alma, Michigan, Chapter*

Adviser Remains in the Background

As the adviser of a chapter, I like to stay in the background. Let the students plan, execute their plans and get practice in leadership activities. Our officers do a good portion of contacting the public and officials on activities that pertain to agriculture and the chapter. In the war production training, the boys not only help advertise the courses but they are on hand to participate by giving demonstrations and helping in other ways. Chapter members are encouraged to help farmers do jobs that they might not otherwise do. Each officer is encouraged, during the summer, to work out a program as it pertains to his responsibility. He acquaints himself with the manual and is ready to meet other officers and work out the year's activities.—*Auburn, Alabama, Chapter*

Co-operation in the Chapter

We believe in co-operative activities in our chapter. We have a swine co-operative, a dairy co-operative, and a loan committee. All of these co-operatives function under a central president and secretary. Each co-operative also has its president and secretary. The swine

co-operative mixes feed and minerals. It also purchased a boar. The fund for this purchase was derived from the sale of shares of stock to boys who own sows of the same breed. One share is sold for each sow. The boy has the privilege of selling his share of stock to another member if, per chance, he disposes of his sow. One boy is designated to care for the boar and in return receives all service fees for feed and general care. If the fees are insufficient to take care of the expenses, an assessment is levied on all members.—*Forest Grove, Oregon, Chapter*

Greetings to Boys in Service

Many of our Future Farmers are in the armed forces. To show our faith in them and as a means of giving the boys glad tidings, our chapter is sending a periodic Newsletter. This letter, together with gifts, is sent to the boys at the front. We also make a practice of having parties for inductees and for those who are home on furloughs.—*Embarass, Minnesota, Chapter*

Sharing the Responsibility

Co-operative activity is the key to chapter success. On this basis we have organized sheep shearing and dipping co-operatives, brooder house co-operatives, and maple sirup production co-operatives. The brooder house construction has resulted in several improvements in the ventilating system.—*Brookston, Minnesota, Chapter*

Not Always on the Receiving End

I sometimes think members always have their hands out, always anxious to receive with little consideration to giving. In our chapter we have made a practice of giving and contributing to worthy causes, such as the building of the Range Riders Museum, the American Red Cross, the Salvation Army, and similar community organizations. When the Carnegie Public Library was putting on a drive for memorial books, the Custer Chapter contributed \$415 for the purchase of books as a memorial to all of our members who are in war service.—*Custer, Montana, Chapter*

Training Officers

As adviser, I have followed the practice of being only a member of the executive committee and letting all responsibility for planning rest with this committee and its sub-committees. The president carries the heavy load. However, this year the president has succeeded in delegating a big share of the responsibility to his officers largely by keeping them free from all duties except executive work. They serve on no other committees, either standing or special. It is surprising how quickly they develop executive ability.—*Myrtle Point, Oregon, Chapter*

Secure FPWT Enrollment

I believe one of the most successful means of contacting farmers for the organization of food production classes is thru the use of the Future Farmers.—*Escalon, California, Chapter*

Base your action on facts, and you will be safe from surprise attacks.

The New Conception of Responsibility

(Continued from page 204)

living for his family.

Remember that, to have a strong nation, people must know how to intelligently use and conserve the natural and human resources.

The Teacher's Job

The teacher of vocational agriculture should be of such caliber as to be the real agricultural leader of the community. He should be able to inspire farm people to want to improve their farm practices. This teacher should be familiar with, and interested in, rural life problems and have a sympathetic understanding of farm people. Also, he should have a philosophy of training and service for all of the people and be able to visualize a program that can be carried out for complete school-community development. He should be able to plan and work with all of the teachers of the entire school as well as with the people of the community in developing a training program that will meet the needs of the people in bringing about improved conditions. The teacher of vocational agriculture must realize that there will be a definite need for improving the health conditions of our Nation by improving the diets of all of the people with nutritious foods at all times. Food will be necessary, not only to win this war, but to live at home and to improve the school-lunch program so that our children will always be properly nourished so they can grow and develop into useful citizens. In the past, emphasis had been given to careful selection of students for training in vocational agriculture. This may be wise to some extent, but a new conception should be that it is necessary for a teacher of vocational agriculture to plan a program to meet the needs of all of the people in a rural community instead of a program for a selected group. The teacher's concept must be for a more expanded training and service such as holding local clinics for butchers of the community to teach them how to cut and handle meat properly for commercial purposes. Another example may be where training will be given thru incubation units, not only for the improvement of poultry flocks on the farms but for the development of commercial hatcheries and commercial poultry flocks. The department of vocational agriculture should be a farm laboratory for the community. It should be equipped with the necessary facilities to give the type of training and service needed for all of the farm people; for example, school-community canning plants and dehydration and refrigeration units may be developed where farm families can learn how to process food necessary to live at home. Incubation units, feed mills, slaughtering pens, sirup mills, farm shops, sawmills, smoke houses, green-houses, slat houses, and marketing sheds are examples of some of these units. When these units are developed, the teacher of vocational agriculture will have to assume the responsibility of leadership or serve as the head of the department having specially-trained teachers or helpers to assist in developing the program. It will be necessary, then, for him not only to plan but to organize, supervise, and assist the special teachers

and helpers under his direction so that an efficient program will be carried out. In addition, there may be a need for special teachers for evening school activities and part-time programs. These teachers should be under the direction of the head of the department in the school. The teacher of vocational agriculture should always realize that the training of Future Farmers for the vocation of farming is sound and practical and is of state and nationwide importance to this and future generations. There will always be a need for good leaders in agriculture.

Civics and Health

A teacher of vocational agriculture having a philosophy of education and service that makes his department a farm laboratory for the people of the community will be able to render a great service and make a genuine contribution to the development of useful citizenship in our rural areas. When people learn about improvements, they desire to improve their farm and home conditions and, as a result, are able to realize more of the happiness and contentment that comes from rural life. With the type of program that reaches out into the lives of the people, modern conveniences are brought to the community, income and purchasing power of the farmer are increased, the foundation is laid for a healthier people, the community develops a civic consciousness, and the way is opened for a far more attractive and profitable farm life in this Nation. There is no doubt in my mind but that this type of training will help to develop strong young people so that, when they go out into the world, they will be well-trained and useful citizens and be capable of taking their places in life. It will give us a citizenship that can tackle and solve our national problems. It will build up morale among our people. With such a program we need not fear regimentation nor should we fear a crime wave. By urging our rural people to live for something and by building the right foundation, the ideals of Democracy will stand and security will be assured no matter what the adversities of life may present.

I have not attempted to give every detail in connection with a new conception of the responsibilities of a teacher of vocational agriculture to his school and

Employer Training Classes (Continued from page 210)

Harvesting Beans

October 10th, 1943

Type of Work		Evaluation Form		Date
Name	Amount Picked or Hours Worked	Amount Earned	Comment	
John Brown	70 lbs.	\$1.40	Steady worker	
Alice Smith	50 lbs.	1.00	Co-operative	
James Doe	65 lbs.	1.30	Could have done better	

4. Agreement as to the wage scale for the different types of work.
5. The length of the working day and time allowed for lunch.

The Second Meeting:

1. Employer responsibility.
2. The provision of drinking water.
3. Providing of shelter and rest-room facilities.
4. The prevention and treatment of accidents.
5. Pupil instruction in safety factors.
6. Supplying of First Aid materials in the field.
7. Psychology of handling student workers.

Rest Periods

Pupil Discipline

Reporting bad discipline cases to the school authorities.

Third Meeting:

1. Training the worker in performing his work with skill. Demonstration by the teacher of agriculture.
2. To further help the farmer in getting the most work from the pupil without

losing sight of their limitation of strength and endurance.

3. An exchange of ideas among the farmers regarding the most efficient methods of harvesting the particular crop under consideration.

Pupil Work Evaluation Forms were formulated by the class, under the supervision of the teacher of agriculture. This was to be used as a guide for the farmer as well as the school administrators.

Results of the School Labor Program

The total program employed 93 different pupils. The total high-school enrollment was 120. During the brief harvest season of three weeks, pupils picked five tons of string beans and 15 acres of potatoes which yielded 1,500 bushels. The boys of the school harvested 85 acres of field beans. This work entailed pulling, forking, stacking, and threshing. These same boys helped to harvest 50 acres of silage corn. Girls assisted the boys in cutting and shocking 20 acres of field corn.

Banquet Banter

Toastmaster: "Ladies and gentlemen, we come now to speaker of evening, our state supervisor. In presenting Superintendent Blank few moments ago might have introduced him as "pilot balloon," but feared he might not understand. Got idea last summer from F.F.A. trip to center of largest dirigibles. We boys saw mammoth hanger with massive doors operated by motors and, within, two enormous dirigibles recently completed and awaiting test flights. Adviser asked how they knew when it was safe to take out dirigible. Guide told us used "pilot balloons," small balloons which were sent up to test conditions before they turned the big gas bag loose. Ladies and gentlemen, our state supervisor.

State Supervisor: "Ladies and gentlemen. My congratulations to your department of vocational agriculture including your superintendent and your teacher who have co-operated to make this such a happy occasion to this time. Have known toastmaster for some time and have seen him on different occasions. One Sunday evening happened to attend church were he and his favorite blonde attend and, sure enough, that evening they were there. One fine couple, of course, well behaved as all Future Farmers are, but Jim's girl attracted my attention by wearing sort of green lipstick instead of usual red. Of course, conspicuous. I supposed it was just latest style and thought nothing more about it. This evening, however, I asked superintendent and he tells me that Jim is very conscientious and law abiding and, of course, knowing that a red traffic light means "stop," he asked his girl to change her lipstick to green."

The Flag on the Farm

We've raised a flagpole on the farm
And flung Old Glory to the sky,
And it's another touch of charm
That seems to cheer the passer-by,
But more than that, no matter where
We're laboring in wood, and field,
We turn and see it in the air,
Our promise of a greater yield.
It whispers to us all day long
From dawn to dusk: "Be true, be strong;
Who falters now with plow or hoe
Gives comfort to his country's foe."

It seems to me I've never tried
To do so much about the place,
Nor been so slow to come inside.
But since I've got the flag to face,
Each night when I come home to rest
I feel that I must look up there
And say: "Old Flag, I've done my best,
'Today I've tried to do my share."
And sometimes, just to catch the breeze
I stop my work, and o'er the trees
Old Glory fairly shouts my way:
"You're shirking far too much today!"

The help have caught the spirit, too;
The hired man takes off his cap
Before the old red, white, and blue,
Then to the horses says, "Giddap!"
And starting bravely to the field
He tells the milkmaid by the door;
"We're going to make these acres yield
More than they've ever done before."
She smiles to hear his gallant brag,
Then drops a curtsy to the flag,
And in her eyes there seems to shine
A patriotism that is fine.

We've raised a flagpole on the farm
And flung Old Glory to the sky,
We're far removed from war's alarm,
But courage here is running high.
We're doing things we never dreamed
We'd ever find the time to do;
Deeds that impossible once seemed
Each morning now we hurry thru.
The flag now waves above our toil
And sheds its glory on the soil,
And boy and man look up to it
As if to say: "I'll do my bit!"

—Edgar Allen Guest

